

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

**Mansfield Mill  
International Paper Company  
Mansfield, Desoto Parish, Louisiana  
Agency Interest Number: 328  
Activity Number: PER20050002  
Draft Permit 0760-00006-V7**

**I. APPLICANT:**

**Company:**

International Paper Company  
1202 Hwy 509, Mansfield, LA 71052

**Facility:**

Mansfield Mill  
1202 Hwy 509, Mansfield, Desoto Parish, Louisiana  
Approximate UTM coordinates are 447.59 kilometers East and 3558.00  
kilometers North, Zone 15

**II. FACILITY AND CURRENT PERMIT STATUS:**

International Paper Company (IP) owns and operates a kraft pulp and paper mill near the city of Mansfield, Louisiana, in DeSoto Parish. The mill currently operates under Permit Nos. 0760-00006-V6 and PSD-LA-93(M-7), both dated July 22, 2004.

**III. PROPOSED PERMIT / PROJECT INFORMATION:**

**Proposed Permit**

A permit application and Emission Inventory Questionnaire were submitted by International Paper Company on May 12, 2005, requesting a Part 70 operating permit. Additional information dated October 20, 2005, was also received.

With this modification, International Paper proposes to:

- Incorporate a specific condition detailing all of the approved fuels for the No. 1 and No. 2 Power Boilers (EQT 5 and EQT 35, respectively).
- Seek clarification of the vent allowances for the purposes of reporting excess emissions of LVHC gases and HVLC gases in accordance with 40 CFR 63 Subpart S.

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- Add a new fire water pump (EQT 186) as an emissions source.
- Replace-in-kind the No. 1 Recover Boiler Blend Tank, No. 2 Recover Boiler Blend Tank, and the Wet Crude Oil Tank.
- Incorporate a clarification of the NO<sub>x</sub> limit during low-load operations for the Gas Turbine/HRSG Stack (EQT 7). This clarification was previously approved and was included in Permit No. PSD-LA-93(M-7).
- Seek an equivalency determination showing that compliance with the monitoring, testing, and recordkeeping requirements of 40 CFR 63 Subpart S will satisfy certain conditions of LAC 33:III.2115.
- Incorporate a consolidation of monitoring, recordkeeping, and reporting requirements of 40 CFR 60 Subpart BB requirements with the more stringent 40 CFR 63 Subpart MM requirements for the Lime Kiln (EQT 6), the No. 1 Smelt Dissolving Tank (EQT 15), and the No. 2 Smelt Dissolving Tank (EQT 38). This consolidation was previously approved by letter dated January 13, 2005, by the Environmental Protection Agency.
- Revise the calculation method used to determine emissions for the Coal Storage/Handling (FUG 1) to more accurately reflect operations at this facility.
- Revise the calculation method used to determine emission for the Wastewater Treatment system (EQT 13) to reflect new site-specific test data and updated literature.
- Revise the current Compliance Assurance Monitoring (CAM) requirements for the Lime Slaker (EQT 14) to reflect a planned change from an induced draft venturi scrubber to a natural draft venturi scrubber.

**Project description**

Production activities at the Mansfield Mill include pulp production (SICC 2611) and linerboard production (SICC 2631). Primary operations at the mill include multiple fuel-fired boilers (power), wood pulping, chemical recovery, causticizing and lime recovery, a recycle area (de-inking), papermaking, and additional operations and equipment necessary to support these activities.

**Power Operations**

The Mansfield Mill currently produces all of the steam used by mill processes and includes five steam and/or power generating units and associated processes and equipment. Two power boilers, capable of firing multiple fuels, provide steam for mill production processes and power generation. Two recovery boilers, firing primarily black liquor, and a natural gas-fired stationary combustion turbine also provide steam for mill production processes and power generation. The turbine is

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equipped with a heat recovery steam generator (HRSG) duct burner, which generates steam from the turbine exhaust gases. Two package boilers can be rented for temporary backup to the steam generating units at the mill. Electricity is generated from three steam turbines and the gas turbine.

Fuels combusted in the Mansfield Mill steam and power generating units include fossil fuels, biomass fuels, and waste fuels (including tire derived fuel, or TDF). Fuels are generated on-site, delivered by truck or rail and stored on-site, or delivered by pipeline. Fuel storage operations include fuel oil (Nos. 2, 4, and 6 fuel oils, distillate grades, used or specification oil, and other petroleum mineral spirits) and gasoline storage and dispensing. Two No. 6 fuel oil storage tanks and two No. 2 fuel oil tanks comprise the majority of fossil fuel storage capacity at the facility.

No. 6 fuel oil can be fired in the power boilers, recovery furnaces, and the Lime Kiln; and No. 2 fuel oil can be burned in the power boilers, recovery furnaces, the Lime Kiln, and several stationary internal combustion (IC) engines. Other grades of fuel (i.e., No. 4, distillate, used, on-spec, or other petroleum mineral spirits) are combined with the Nos. 2 or 6 fuel oils in the existing storage tanks. Gasoline is stored at the facility for use in mobile equipment and stationary IC engines. Currently, eleven stationary IC engines (1 gasoline-fired and 10 diesel-fired) provide backup power generation capacity during power outages or other emergencies.

The Nos. 1 and 2 Power Boilers are rated at 760 MM Btu/hr and are permitted to burn bark/wood debris, paper, solid wood residuals, creosote-treated railroad cross-ties, recycle plant sludge, unrecyclable old corrugated container material, bagasse, coal, no. 2 fuel oil, no. 4 fuel oil, no. 6 fuel oil, distillate grades of fuel oil, used on-specification oil, used petroleum mineral spirits, onsite fuel oil solids, natural gas, tire-derived fuel, solid paraffin, high caustic, pine tar fuels, conforming waste material, polyethylene wax, and woodwaste materials containing phenol-formaldehyde resin which is otherwise known as PlyTrim. The boilers are equipped with multi-cyclones followed by electrostatic precipitators (ESP) for particulate matter control.

Currently, all steam generated from the power boilers, duct burner/HRSG, and recovery boilers is sent to a common header. From this common header, steam can be sent to various mill processes (i.e., digesters and paper machines) or sent through one of the steam turbines to generate electricity. Any additional electricity needed is purchased from CLECO.

### **Pulping Operations**

The Mansfield Mill has three pulping lines: Primary, Secondary, and Semi-chemical. Hardwood and/or softwood chips are cooked with white liquor in the Primary and Secondary Continuous Digesters. Hardwood chips are cooked with white and green liquor in the Semi-chemical Continuous Digester.

The pulp slurry from the digesters is refined, washed in diffusion washers, stored in high density storage tanks, and then sent to the paper machine area. Vents from the diffusion washers and associated filtrate tanks are collected in the high volume, low concentration (HVLC) system. Spent cooking liquor, or weak black

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liquor, from the diffusion washers is used to wash the pulp in the digesters and/or sent to the chemical recovery area. Gases from the digester system are routed through a series of condensers, scrubbed, and then incinerated in the Lime Kiln or back-up NCG Incinerator.

Turpentine is recovered as a byproduct from condensed gases from the pine pulping process. Overheads from the turpentine recovery process are routed through the low volume, high concentration (LVHC) NCG System.

**Chemical Recovery Operations**

Kraft and semi-chemical weak liquor from the pulping process is filtered and stored in separate weak black liquor tanks. The liquor is combined in the "swing" black liquor tank and concentrated in one of two parallel lines which include a six-effect evaporator system, intermediate storage, and a concentrator system. Tall oil soap is produced as a byproduct of the evaporation process. Liquor is extracted from an intermediate stage of each evaporator system and sent to a dedicated soap skimmer where tall oil soap is skimmed from the top of the tank. The soap is then sent to collection tanks and combined in the soap storage tank prior to being sent to the Tall Oil Plant. NCGs from the evaporator systems are partially condensed, and remaining gases are routed to the LVHC NCG system. Condensates are recycled to the diffusion washers and/or causticizing area. Targeted foul and combined evaporator condensates are collected in a closed collection system and hard-piped to the existing foul condensate tank or to the existing stripped condensate tank. The foul condensate tank is vented to the LVHC system and the stripped condensate tank is vented to the HVLC system. Condensates are hard-piped to any of the five existing diffusion washers. Any combined condensates not recycled to the diffusion washers are recycled to the causticizing area and used as dilution or wash water.

Liquor from the concentrators is combined in the concentrated black liquor storage tank, sent through the existing High Solids Concentrator, and sent to liquor recovery. Brine from the Tall Oil Plant is introduced into the chemical recovery area prior to the High Solids Concentrator. The Mansfield Mill operates two liquor recovery systems that process concentrated liquor. The Mill recovers cooking chemicals by firing black liquor solids into either of two non-direct contact recovery boilers (No. 1 and No. 2 Recovery Boilers). The organics from the liquor are combusted to generate heat for process steam, while the inorganic chemicals collect in the bottom of the boilers in the form of molten smelt. Each boiler is fed heavy liquor and has its own associated smelt tank, electrostatic precipitator (ESP), and exhaust stack.

The molten smelt from each recovery boiler is directed to one of two dedicated tanks, where it is dissolved into weak wash or water to form green liquor, a prelude step to regenerating white liquor in the causticizing operation. Each smelt tank is equipped with a Ducon scrubber system designed to capture particulates and gaseous pollutants and return them to the tank.

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**Tall Oil Operations**

The Tall Oil Plant produces crude tall oil (CTO) from black liquor soap. Black liquor soap is a byproduct of the kraft pulping process that contains fatty resins and oils that have wide commercial uses. CTO is produced in a process called tall oil acidulation, where black liquor soap is combined with sulfuric acid and steam in a continuous reactor, allowing the production of CTO from the mixture. The remaining liquid is a combination of lignin and a brine solution, composed primarily of sodium sulfate and water. The brine solution is introduced back into the recovery cycle for the reclamation of the chemical value (sodium and sulfur).

The Tall Oil Plant allows the mill to generate a maximum of 70,343 tons per year CTO. Emission sources from the plant include a Heel Liquor Sample Tank, soap storage, a continuous tall oil reactor, sulfuric acid storage, CTO storage tanks, and brine storage tanks. The Heel Liquor Sample Tank and soap storage tanks minimize emissions of VOC and TRS from downstream units as settled liquor is sent to weak black liquor storage. (Note: the Heel Liquor Sample Tank is only used during the first few minutes of soap unloading. The purpose of the tank is to collect any settled black liquor during transportation.) Most of the VOC from this liquor is volatilized in the evaporators and destroyed in the kiln. The reactor is equipped with a wet scrubber for control of TRS emissions. In addition, the CTO storage tanks, brine receiver, and cleaner accepts tank are vented through the tall oil scrubber. The brine and settled black liquor from soap storage are introduced into the chemical recovery area. The settled black liquor from the Heel Liquor Sample Tank and soap storage are recycled to any of three weak liquor storage tanks, while the brine is reintroduced into the chemical recovery area prior to the High Solids Concentrator.

**Causticizing and Lime Recovery Operations**

In the causticizing/lime recovery area, dissolved smelt (called green liquor) from the smelt dissolving tanks is clarified, stored, and then mixed with lime (CaO) in the slaker. The sodium salts in the green liquor react with the CaO to form white liquor and lime mud (CaCO<sub>3</sub>) in the causticizers. This white liquor/lime mud slurry is then clarified to separate the white liquor from the lime mud. The white liquor is sent to the digesters, and the lime mud is conditioned in the lime mud mix tank and washers, stored, thickened in the precoat filter, and then burned in the lime kiln to form CaO. Fuels burned in the lime kiln include natural gas, fuel oils (Nos. 2, 4, and 6, distillate grades, used or spec oil, and other petroleum mineral spirits) and LVHC NCG gases. The slaker and lime kiln are equipped with wet scrubbers. Weak wash from the lime mud washers is used to dissolve the inorganics in the smelt tank and for PM/TRS control in the smelt tank scrubbers.

Burnt lime from the lime kiln is conveyed to a lime silo for storage prior to being added to the slaker. The mill can also purchase fresh lime, which is blown from trucks and added to the same silo as the burnt lime. Fresh/reburnt lime is dropped into the slaker from the bottom of the silo. The lime silo and bucket elevator are exhausted through the slaker scrubber.

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**Gas Collection System**

The Mansfield Mill operates two separate gas collection systems: HVLC and LVHC. In the HVLC System, vents collected from the stripped condensate tank, diffusion washers, and associated filtrate tanks are burned in the natural gas-fired HVLC Incinerator. Combusted gases pass through a quench tower and scrubber equipped with a mist eliminator and then out the stack, while the liquid is routed to the sewer system.

In the LVHC NCG System, NCG gases are collected in three separate lines. The concentrated pulp system collects NCGs from the digester and turpentine recovery systems. The dilute pulp system collects NCGs from the digester chip bin vents. The Powerhouse concentrated system collects NCGs from the evaporator, concentrator, and steam stripper systems.

The three inlet streams each pass through a wet scrubber and are normally burned in the lime kiln. The NCG Incinerator is a backup system used to destroy the NCGs in case the lime kiln is unavailable. The incinerator is kept running continuously on standby, burning natural gas so that it remains at a suitable operating temperature should the NCGs need to be diverted from the lime kiln.

**Papermaking and Recycle Operations**

The Mansfield Mill produces unbleached and white top linerboard and corrugating medium from the Nos. 1, 2, and 3 Paper Machines. Furnish for each of the machines can be either virgin pulp from the three pulp lines or recycled pulp from the recycle plant.

Virgin or recycle pulp from the pulp mill high density storage tanks or from the recycle storage tanks is sent to the low density storage tanks, where it is refined, screened, and combined with wet end additives prior to being diluted with recycled water at the primary and secondary head boxes of the machine. The low consistency slurry is then applied to the wire, where it forms the sheet. Water drains by gravity and by vacuum into a series of pits, while the wet sheet travels to the press and drier sections to remove the remaining water. Paper is cut and rolled onto finishing reels.

All paper machine water, called white water, is screened in the save-all to recover any lost fiber, and then either stored and recycled within the mill or sewer to the wastewater treatment plant. A fiber recovery system is also installed for the white water that is sent to the sewer. Recovered fiber is recycled back via the broke system. Scrap paper from the finishing operations is repulped and combined with the recovered fiber from the save-all in the broke storage chests. This pulp is then recycled to the primary machine chest.

The recycle plant consists of two lines. One line has a continuous repulper; the other has two batch repulpers in parallel. The recycle plant is capable of processing old corrugated containers, mixed papers, and deinked fibers. The pulp

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slurry is screened, washed, and bleached (non-chlorine bleaching) prior to being sent to the low density storage tanks in the paper machine areas.

**Additional Mill Operations**

The Mansfield Mill maintains miscellaneous operations that support pulp and paper production. Operations in this area include wood supply, raw water treatment, wastewater collection and treatment, waste treatment and disposal, road traffic, maintenance, process cooling, quality control, and other support operations that are insignificant sources of regulated air pollutants. The Woodyard processes all wood used in the digesters and all woodwaste used as fuel in the power boilers.

Pine and hardwood logs are delivered by truck or railcar and processed separately. The logs are cut in the slasher, debarked, chipped, and conveyed to separate chip piles. Purchased chips are unloaded from trucks, screened, and conveyed to the hardwood or softwood chip pile. Hardwood chips are screened and conveyed to the Secondary or Semi-chemical Digesters; pine chips are screened and conveyed to the Primary or Secondary Digesters. The chip screens are enclosed, and the conveyors are partially or totally enclosed to minimize emissions during transport.

Bark and sawdust from the slashers, bark from the debarking drums, and fines from purchased or own-make chip screening are conveyed to the bark pile and then fired in the Nos. 1 and 2 Power Boilers.

Raw water used in the Mill is pumped approximately 28 miles from the Toledo Bend Reservoir and used throughout the Mill as process and cooling water.

The wastewater from the Mansfield Mill consists of storm water from process areas, sanitary wastewater, and process wastewater from the papermaking, recycle, power, pulping, and causticizing and lime recovery operations. The process wastewater is sent to the primary clarifiers, where solids can be settled, and then treated by land application through spraying or wetlands flow. Currently, most of the wastewater is sprayed onto the land (~600 acres), with treated water being collected and piped five miles for discharge to the Red River. The remaining wastewater is pumped to a wetland area for treatment, with treated water being collected and piped to the Red River. A surge basin stores wastewater during times of excessive flow. The sanitary wastewater is pretreated, chlorinated, then applied to land in combination with the clarified process wastewater.

The Mansfield Mill disposes of process waste in an onsite landfill. Process waste includes ash from the power boilers, woodyard waste, sludge from the wastewater pretreatment process, recycle plant rejects, caustic plant waste (i.e., dregs, lime, and slaker grit), refuse, and miscellaneous waste (e.g., ditch clean-up).

Road traffic occurs from the delivery of raw materials (i.e., purchased chips, logs, paper machine additives, and chemicals) and the transport of products (i.e., paper,

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turpentine, and crude tall oil). Maintenance operations include welding and metal fabrication, painting, as well as routine equipment and building upkeep.

Section 6 of the Permit Application, dated May 12, 2005, lists the permitted emission rate before and after the project (in tons per year) for each emission point in the permit. These changes are summarized in the Permitted Air Emissions Section.

**Permitted Air Emissions**

Estimated changes in permitted emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM <sub>10</sub>	1409.00	1392.05	- 16.95
SO <sub>2</sub>	8859.80	8859.84	+ 0.04
NO <sub>x</sub>	6229.00	6228.37	- 0.63
CO	9271.90	9270.47	- 1.43
VOC	4767.10	5175.84	+ 408.74
TRS	303.60	225.66	- 77.94

**Prevention of Significant Deterioration Applicability**

The pollutants are not being increased by significant amounts by the project. Therefore, the proposed facility is not subject to the requirements of the PSD program.

This application was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) does not apply.

**MACT requirements**

Mansfield Mill is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Mansfield Mill's power boilers will be subject to 40 CFR 63 Subpart DDDDD-National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters.

The facility complies with the ambient air standards (AAS).



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**Air Modeling Analysis**

No dispersion modeling was performed.

**General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

**Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

**Regulatory Analysis**

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit.

**IV. Permit Shields**

There is no permit shield.

**V. Periodic Monitoring**

**Compliance Assurance Monitoring**

Federal regulation 40 CFR 64-Compliance Assurance Monitoring is applicable to this facility. Applicability for each pollutant requires that the unit be subject to an emission limitation or standard and must use an active control device to achieve compliance. The following emission sources with pollution control equipment have a pre-control emission rate of a pollutant over 100 tons per year and were determined to require a CAM Plan: EQT 5 – No. 1 Power Boiler, EQT 12 – Oxidized Starch Silo, EQT 14 – Lime Slaker, EQT 22 – Pearl Starch Silo, EQT 35 – No. 2 Power Boiler, and EQT 184 - Cationic Starch Silo.

The electrostatic precipitator (ESP) serves to collect and reduce the particulate emissions associated with the combustion of wood waste material. The monitoring conducted by the continuous opacity monitoring system (COMS)

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ensures that particulate emissions are being controlled. Readings are recorded as a six minute average.

The baghouse serves to collect and reduce particulate emissions associated with the manufacture of pulp and paper products. Opacity is used to determine if particulate emissions are exceeded. Visual examinations of emissions from the baghouses are conducted to determine the efficiency. These examinations occur every time the starch silos are unloaded. Should the opacity check result in an observation of excess emissions, baghouse will be inspected and if necessary, repaired. In addition, semiannual inspections of the baghouse will be conducted to determine if repair is necessary.

The natural draft scrubber is used to control serves to collect and reduce the particulate emissions associated with the operation of the Lime Slaker (EQT 14). The flow rate of the water being sprayed into the stack will be monitored continuously to ensure it remains above the level necessary to keep the particulate emissions below permitted limits. If the flow rate drops below the established flow rate, then the operators will attempt to restart the pump providing the water. If the pump can not be restarted, then the Lime Slaker will be shut down until the malfunction can be repaired.

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The requirements for these sources are summarized below

<b>CAM Requirement</b>	<b>No. 1 Power Boiler (01-78), EQT 5</b>	<b>No. 2 Power Boiler (02-78), EQT 35</b>
Control Device(s)	Multicyclone/ESP (PM)	Multicyclone/ESP (PM)
Is the unit a major source post control?	Yes – post control emissions are 332.9 tpy PM	Yes – post control emissions are 332.9 tpy PM
Applicable PM limit	PM based on NSPS Subpart D (0.1 lb/MMBtu)	PM based on NSPS Subpart D (0.1 lb/MMBtu)
Performance indicator, monitoring approach, and monitoring frequency	The existing continuous opacity monitoring system (COMS) will be used as a continuous indicator of proper operation of the boiler and control devices.	The existing continuous opacity monitoring system (COMS) will be used as a continuous indicator of proper operation of the boiler and control devices.
Justification for parameters selected	An increase in opacity from the ESP indicates an increase in PM emissions. During normal operation, opacity typically is 5% or less and there is a large margin of compliance with the PM limit (last test averaged 0.012 lb PM/MMBtu, 2% opacity).	An increase in opacity from the ESP indicates an increase in PM emissions. During normal operation, opacity typically is 5% or less and there is a large margin of compliance with the PM limit (last test averaged 0.012 lb PM/MMBtu, 2% opacity).
Indicator ranges	Opacity <20%	Opacity <20%
Quality Assurance/Quality Control (QA/QC) Practices	Daily zero/span check of the opacity monitor and ongoing program of preventative maintenance activities.	Daily zero/span check of the opacity monitor and ongoing program of preventative maintenance activities.
Monitoring data averaging period	6 minutes	6 minutes
Data collection procedures	COMS data acquisition system records opacity data and periods of calibration.	COMS data acquisition system records opacity data and periods of calibration.
APCD bypass monitoring	Bypass of the ESP is not possible.	Bypass of the ESP is not possible.

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<b>CAM Requirement</b>	<b>Oxidized Starch Silo (33-93), EQT 12</b>	<b>Lime Slaker (08-78), EQT 14</b>
Control Device(s)	Baghouse	Scrubber
Is the unit a major source post control?	No – post control emissions are 0.8 tpy.	No – post control emissions are 5.3 tpy
Applicable PM limit	1.8 lb/hr, 0.8 tpy – permit limits	2.1 lb/hr, 5.3 tpy – permit limits
Performance indicator, monitoring approach, and monitoring frequency	The starch silo outlet is observed for any visible emissions during starch unloading.	Minimum liquid flow to ensure a vacuum in the stack or PM emissions below 2.1 lb/hr and 5.3 tpy.
Justification for parameters selected	If visible emissions are observed, the baghouse is not operating properly.	The control device is a natural draft scrubber, where liquid is sprayed into the stack, which collects PM. The Mill will establish a minimum flow that will reduce PM below permitted emission rates. If the scrubber flow is above the minimum value established, the control device is working properly.
Indicator ranges	No visible emissions. If VE are observed, unloading will be discontinued and the operator will take corrective action.	If there is less than the established liquid flow, an alarm sounds. If the pump cannot be started immediately, the slaker is shut down. The scrubber flow will be interlocked with the lime metering screw to the slaker bowl.
Quality Assurance/Quality Control (QA/QC) Practices	Preventive maintenance and calibration per manufacturer's recommendations.	Preventive maintenance and calibration per manufacturer's recommendations.
Monitoring data averaging period	None.	None.
Data collection procedures	Documentation of any maintenance performed as a result of visible emissions observations.	Documentation of any maintenance performed as a result of visible emissions observations.
APCD bypass monitoring	No bypass is possible.	No bypass is possible.

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<b>CAM Requirement</b>	<b>Pearl Starch Silo (61-01), EQT 22</b>	<b>Cationic Starch Silo (32-93), EQT 184</b>
Control Device(s)	Baghouse	Baghouse
Is the unit a major source post control?	No – post control emissions are 0.5 tpy.	No – post control emissions are 0.5 tpy.
Applicable PM limit	1.8 lb/hr, 0.5 tpy – permit limits	1.8 lb/hr, 0.5 tpy – permit limits
Performance indicator, monitoring approach, and monitoring frequency	The starch silo outlet is observed for any visible emissions during starch unloading.	The starch silo outlet is observed for any visible emissions during starch unloading.
Justification for parameters selected	If visible emissions are observed, the baghouse is not operating properly.	If visible emissions are observed, the baghouse is not operating properly.
Indicator ranges	No visible emissions. If VE are observed, unloading will be discontinued and the operator will take corrective action.	No visible emissions. If VE are observed, unloading will be discontinued and the operator will take corrective action.
Quality Assurance/Quality Control (QA/QC) Practices	Preventive maintenance and calibration per manufacturer's recommendations.	Preventive maintenance and calibration per manufacturer's recommendations.
Monitoring data averaging period	None.	None.
Data collection procedures	Documentation of any maintenance performed as a result of visible emissions observations.	Documentation of any maintenance performed as a result of visible emissions observations.
APCD bypass monitoring	No bypass is possible.	No bypass is possible.

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<b>VI. Applicability and Exemptions of Selected Subject Items</b>		
<b>ID No:</b>	<b>Requirement</b>	<b>Notes</b>
Facility-wide	LAC 33:III.1311 Emission Limits	DOES NOT APPLY. Applies to any operation, process, or activity from which particulate matter is emitted except the wood pulping industry, the primary aluminum industry (horizontal stud Soderberg and prebake processes), and the burning of fuel for indirect heating in which the products of combustion do not come into direct contact with process materials.
	LAC 33:III.Chapter 59 Chemical Accident Prevention Program	DOES NOT APPLY. Source does not produce, process, handle, or store any substance listed in 40 CFR 68.130 or Table 59.0 and 59.1 of LAC 33:III.Chapter 59 in amounts greater than the threshold quantities.
	40 CFR Part 68 Chemical Accident Prevention Provisions	DOES NOT APPLY. Source does not have more than a threshold quantity of a regulated substance in a process as determined under §68.115.
EQT 5 EQT 35	LAC 33:III.915 Emission Monitoring Requirements	EXEMPT. Sources are exempt from §915.A because they are subject to a new source performance standard promulgated in 40 CFR Part 60, that being NSPS Subpart D. §915.D
	LAC 33:III.1511 Continuous Emissions Monitoring	The continuous emissions monitoring requirements of §1511.A do not apply because the boilers are exempt from the emission monitoring requirements of 40 CFR Part 51, Appendix P (§915.D).

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	LAC 33:III.5109 Comprehensive Toxic Air Pollutant Emission Control Program (STATE-ONLY)	EXEMPT. The administrative authority shall initiate a review of toxic air pollutants derived from the burning of wood residue fuel at pulp and paper mills. Emissions from the combustion of such fuel shall be regulated if the administrative authority determines that such regulation is appropriate and necessary. Until the administrative authority makes a final determination, emissions from the combustion of wood residue fuel are exempt from the provisions of LAC 33:III.5109. §5105.B.7
EQT 7	LAC 33:III.5109 Comprehensive Toxic Air Pollutant Emission Control Program (STATE-ONLY)	Emissions from the combustion of Group 1 virgin fossil fuels are exempt from the requirements of Subchapter A of LAC 33:III.Chapter 51. §5105.B.3.a
EQT 6 EQT 15 EQT 38	40 CFR 64 Compliance Assurance Monitoring	EXEMPT. CAM does not apply to emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act. Sources are subject to particulate standards under §63.862 of 40 CFR 63 Subpart MM. §64.2(b)(1)(i)

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EQT 36 EQT 37	LAC 33:III.915 Emission Monitoring Requirements	<p>EXEMPT. Boilers are exempt from the SO<sub>2</sub>, NO<sub>x</sub>, and O<sub>2</sub>/CO<sub>2</sub> emission monitoring requirements of 40 CFR Part 51, Appendix P.</p> <ul style="list-style-type: none"> <li>• SO<sub>2</sub> CEMS not required because no SO<sub>2</sub> pollution control equipment has been installed. (2.1.2)</li> <li>• NO<sub>x</sub> CEMS not required because boilers have a heat input less than 1000 MM BTU/hr and DeSoto Parish is in attainment for NO<sub>x</sub>. (2.1.3)</li> <li>• O<sub>2</sub> or CO<sub>2</sub> CMS not required because SO<sub>2</sub> and NO<sub>x</sub> CEMS are not required. (2.1.4)</li> </ul>
	LAC 33:III.1511 Continuous Emissions Monitoring	The continuous emissions monitoring requirements of §1511.A do not apply because an SO <sub>2</sub> CEMS is not required per 40 CFR Part 51, Appendix P (§915.A).
	40 CFR 60 Subpart D Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971	Maintain annual capacity factor for fossil fuel below 10%.
	40 CFR 64 Compliance Assurance Monitoring	<p>EXEMPT. CAM does not apply to emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act. Boilers are subject to particulate standards under §63.862 of 40 CFR 63 Subpart MM.</p> <p>§64.2(b)(1)(i)</p>



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EQT 11 EQT 18 EQT 26 EQT 27 EQT 28 EQT 29 EQT 30 EQT 31 EQT 32 EQT 33 EQT 34	LAC 33:III.5109 Comprehensive Toxic Air Pollutant Emission Control Program (STATE-ONLY)	Emissions from the combustion of Group 1 virgin fossil fuels are exempt from the requirements of Subchapter A of LAC 33:III.Chapter 51. §5105.B.3.a
EQT 16 EQT 169	LAC 33:III.2103 Storage of Volatile Organic Compounds	DOES NOT APPLY. Contents have a true vapor pressure less than 1.5 psia at storage conditions.
	40 CFR 60 Subpart Kb VOL Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	DOES NOT APPLY. Capacity is less than 75 cubic meters (~19,815 gallons). §60.110b(a)
EQT 96 EQT 97	40 CFR 60 Subpart Kb VOL Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	DOES NOT APPLY. Capacity is less than 75 cubic meters (~19,815 gallons). §60.110b(a)
	LAC 33:III.2103 Storage of Volatile Organic Compounds	DOES NOT APPLY. Contents have a true vapor pressure less than 1.5 psia at storage conditions.
	40 CFR 60 Subpart Ka Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	DOES NOT APPLY. No. 6 fuel oil is not considered a petroleum liquid. §60.111a(b)
		Constructed in 1981.
EQT 100	LAC 33:III.2103 Storage of Volatile Organic Compounds	DOES NOT APPLY. Contents have a true vapor pressure less than 1.5 psia at storage conditions.

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	40 CFR 60 Subpart Kb VOL Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	DOES NOT APPLY. Capacity is less than 75 cubic meters (~19,815 gallons). §60.110b(a)
EQT 164 EQT 165 EQT 166 EQT 167 EQT 168	40 CFR 60 Subpart BB Standards of Performance for Kraft Pulp Mills	EXEMPT. Diffusion washers are excluded from the definition of brown stock washer system. §60.281(e)
EQT 6 EQT 7 EQT 10 EQT 11 EQT 15 EQT 18 EQT 26 EQT 27 EQT 28 EQT 29 EQT 30 ETQ 31 EQT 32 EQT 33 EQT 34 EQT 38 EQT 186	Emission Standards for Sulfur Dioxide [LAC 33:III.1503]	EXEMPT. Sources emit less than 250 tons per year of sulfur dioxide. [LAC 33:III.1503.C]

<b>VII. Streamlined Requirements</b>			
<b>Unit or Plant Site</b>	<b>Programs Being Streamlined</b>	<b>Stream Applicability</b>	<b>Overall Most Stringent Program</b>
Mansfield Mill	None	-	-

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**VIII. Glossary**

**Best Available Control Technologies (BACT)** - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

**Carbon Monoxide (CO)** - A colorless, odorless gas which is an oxide of carbon.

**Grandfathered Status**- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

**Hydrogen Sulfide** - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

**Maximum Achievable Control Technology (MACT)** - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

**New Source Review (NSR)** - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

**Nitrogen Oxides (NO<sub>x</sub>)** - Compounds whose molecules consists of nitrogen and oxygen.

**Nonattainment New Source Review (NNSR)** - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

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Organic Compound - Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub>- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) - A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) - An oxide of sulphur.

Title V permit - See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.